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<!--StartFragment-->RESULT 1
AAY95782
ID      AAY95782 standard; protein; 626 AA.
XX
AC      AAY95782;
XX
DT      15-JUN-2007 (revised)
DT      07-NOV-2000 (first entry)
XX
DE      Erysipelothrix rhusiopathiae erysipelas protective antigen.
XX
KW      Erysipelas protective antigen; Epa; SpaA.1; vaccine; infection;
KW      immuno-protective epitope; BOND_PC; surface protective antigen SpaA;
KW      surface protective antigen SpaA [Erysipelothrix rhusiopathiae];
KW      protective antigen SpaA.1;
KW      protective antigen SpaA.1 [Erysipelothrix rhusiopathiae]; spaA;
KW      spaA [Erysipelothrix rhusiopathiae]; G05215; G06810.
XX
OS      Erysipelothrix rhusiopathiae.
XX
FH      Key                Location/Qualifiers
FT      Peptide            1. .29
FT                                  /label= Signal_peptide
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FT                                  /label= Mature_protein
FT      Region             50. .55
FT                                  /note= "LPXTGX motif"
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FT                                  /label= Repeat_R2
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FT                                  /label= Repeat_R3
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FT      Peptide            568. .587
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FT      Peptide            588. .607
FT                                  /label= Repeat_R8
FT      Peptide            608. .626
FT                                  /label= Repeat_R9
XX
PN      WO200047744-A1.
XX
PD      17-AUG-2000.
XX
PF      10-FEB-2000; 2000WO-US003789.
XX
PR      10-FEB-1999; 99US-0119389P.
XX
PA      (UYRQ ) UNIV ROCKEFELLER.
XX
PI      Fischetti VA, Shimoji Y;
XX
DR      WPI; 2000-524541/47.
DR      N-PSDB; AAA50205.
DR      PC:NCBI; gi4586910.
XX
PT      Vaccines for protecting turkeys and pigs against Erysipelothrix
PT      rhusiopathiae infections comprising a polypeptide sequence from the N-
PT      terminal region of an erysipelas protective antigen.
XX
PS      Claim 2; Fig 2; 61pp; English.

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XX
 CC The present sequence is that of the erysipelas protective antigen (Epa or
 CC SpaA.1) of *Erysipelothrix rhusiopathiae* strain Fujisawa, as deduced from
 CC an isolate Epa gene (see AAA50205). *E. rhusiopathiae* is the causative
 CC agent of erysipelas in animals and erysipeloid in humans. Epa shows
 CC structural and sequence similarities to pneumococcal surface protein A
 CC (PspA) and other choline binding proteins of *Streptococcus pneumoniae*.
 CC Its C-terminal region consists of a series of conserved 20-amino acid
 CC repeats (R1-R9). The N-terminal portion of the Epa protein, especially a
 CC polypeptide comprising residues 12-195 of the present sequence, was
 CC identified as a vaccine antigen, protecting mice and pigs from a lethal
 CC challenge with *E. rhusiopathiae*. Vaccines containing immunogenic
 CC polypeptides of *E. rhusiopathiae*, where the immunogenic polypeptide
 CC comprises an immuno-protective epitope from the N-terminal region of Epa,
 CC especially residues 30-447, 30-195 or 30-100 of the present sequence, are
 CC claimed. A claimed method for protecting an animal, especially a turkey
 CC or pig, from infection by *E. rhusiopathiae* involves administering the
 CC vaccine, or an expression vector comprising a nucleic acid encoding the N
 CC -terminal portion or full-length Epa. A claimed method for detecting the
 CC presence of protective antibodies to *E. rhusiopathiae* involves detecting
 CC binding of antibodies in a biological sample with a polypeptide
 CC comprising an immunoprotective epitope of Epa
 CC
 CC Revised record issued on 15-JUN-2007 : Enhanced with precomputed
 CC information from BOND.
 XX
 SQ Sequence 626 AA;

Query Match 100.0%; Score 3265; DB 1; Length 626;
 Best Local Similarity 100.0%; Pred. No. 2.4e-215;
 Matches 626; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      601 KSGMMVTGSKSIDGKKYAFKNDGSLK 626
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